

Text Portion of the Notification of the Second Office Action

The applicant submitted his observations and the amended application documents on Apr. 29, 2007. After further examination, the examiner's comments are as follows:

1. Claim 1 claims the protection of a method for manufacturing an electron-emitting device. Reference 1 (JP9-45236A) discloses a method for manufacturing an electron-emitting device (see paragraphs [0017] and [0046]-[0052] of the specification and Figs. 1-2 of Reference 1), which comprises: a step for forming an organic metallic compound macromolecular polymer film 2 (corresponding to the solid-state insulating polymer film including coupling between carbon atoms in Claim 1) between a pair of electrodes 5, 6 formed on an insulating substrate 1 (corresponding to the substrate in Claim 1); a step for heating said polymer film 2 to change it into an electro-conductive film 4 containing amorphous carbon as a main ingredient (see paragraph [0017] of the specification of Reference 1); a step for providing a potential difference between said pair of electrodes 5, 6 to form a electron emitting portion 3 (corresponding to energize electrically in Claim 1) on the electro-conductive film 4.

As it can be seen, Reference 1 has disclosed all the technical features of Claim 1. The technical solutions disclosed in Reference 1 and claimed by Claim 1 fall in the same technical field, have the same technical problems to be solved and result in the same technical effects, therefore the technical solution claimed by Claim 1 lacks novelty as required by Article 22(2) of Chinese Patent Law.

2. Claim 2 refers to Claim 1. It is a common technical means in the relevant field to heat the polymer film by illuminating an electron beam. A person skilled in the art needs no creative work to utilize the above common technical means. Therefore, as the referred Claim 1 lacks novelty, Claim 2 lacks the inventiveness as required by Article 22(3) of Chinese Patent Law.
3. Claim 3 refers to Claim 1. Reference 2 (CN1176478A) discloses a method for manufacturing an electron-emitting device, and specifically discloses (see page 11 line 24 to page 13 line 10 of the specification and Figs. 1-3 of Reference 2) that an organic film (corresponding to the polymer film in Claim 3) of the electron emitting zone is heated by illuminating laser. As can be seen, the additional technical feature defined in Claim 3 has been disclosed by Reference 2, and this feature functions the same way as in the present invention to solve its technical problem, i.e. to heat the organic film. That is to say, it is obvious for a person skilled in the art to obtain the technical solution claimed by Claim 3 by combining References 1 and 2. Therefore, as the referred Claim 1 lacks novelty, Claim 3 lacks the inventiveness as required by Article 22(3) of Chinese Patent Law.
4. Claims 4, 5 refer to Claim 3. It is a common technical means in the relevant field to use a xenon or halogen lamp as a light source that emits light for heating objects. A person skilled in the art needs no creative work to utilize the above common technical means. Therefore, as the referred Claim 3 lacks inventiveness, Claims 4, 5 lack the inventiveness as required by Article 22(3) of Chinese Patent Law.
5. Claim 6 refers to Claim 3. Reference 2 (see page 11 line 24 to page 13 line 10 of the specification and Figs. 1-3 of Reference 2) discloses that the organic film of the electron emitting zone is illuminated by laser beams. As can be seen, the additional technical feature defined in Claim 6 has been

disclosed by Reference 2, and this feature functions the same way as in the present invention to solve its technical problem, i.e. to heat the organic film. Therefore, as the referred Claim 3 lacks novelty, Claim 6 lacks the inventiveness as required by Article 22(3) of Chinese Patent Law.

6. Claim 8 refers to Claim 1. It is a common technical means in the relevant field to form the polymer film on the substrate utilizing an ink jet system. A person skilled in the art needs no creative work to utilize the above common technical means. Therefore, as the referred Claim 1 lacks novelty, Claim 8 lacks the inventiveness as required by Article 22(3) of Chinese Patent Law.

In light of the above reasons, the present application cannot be granted a patent right according to the current text thereof. The applicant should present a response or submit amendments to the application in the specified time set forth in this Office Action. If the applicant amends the application documents, the amendments should not go beyond the scope of the disclosure as originally filed according to the Article 33 of Chinese Patent Law.

THE PATENT OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA

Address: 6 Xi Tu Cheng Lu, Haidian, Beijing

Post Code: 100088

Applicant:	CANON KABUSHIKI KAISHA	Date of Notification: Date: <u>29</u> Month: <u>06</u> Year: <u>2007</u>
Attorney:	Liu Zhiping	
Application No.:	2004100473444	
Title of the Invention:	ELECTRON-EMITTING DEVICE, ELECTRON SOURCE AND METHOD FOR MANUFACTURING IMAGE-FORMING APPARATUS	

Notification of Second Office Action

1. ☒ The examiner received the response submitted by the applicant on Apr. 29, 2007 to the 1st Office Action and further examination as to substance has been carried out on the above-identified patent application for invention on this new basis.
☐ According to the Reexamination Decision made by the Patent Reexamination Board of the Patent Office on _____ examination as to substance on the above-identified application has been resumed.
2. Further examination as to substance has been carried out based on the documents as specified below:
☐ The amended application documents attached to the response to the previous Office Action.
☒ The application documents based on which the previous examination was carried out and the substitution pages attached to the response to the previous Office Action.
☐ The application documents based on which previous examination was carried out.
☐ The application documents confirmed by the Reexamination Decision.
3. ☒ No further reference documents are cited in this Office Action.
☐ Below is/are the reference document(s) cited in this Notification:

No.	Number(s) or Title(s) of Reference(s)	Date of Publication (or the filing date of conflicting application)
1		Date: __ Month: __ Year: __
2		Date: __ Month: __ Year: __
3		Date: __ Month: __ Year: __
4		Date: __ Month: __ Year: __
5		Date: __ Month: __ Year: __

4. Conclusions of the Action:

- ☐ On the Specification:
- ☐ The amendments to the description do not comply with Article 33 of the Patent Law.
 - ☐ The subject matter contained in the application is not patentable under Article 5 of the Patent Law.
 - ☐ The description does not comply with Article 26 paragraph 3 of the Patent Law.
 - ☐ The draft of the description does not comply with Rule 18 of the Implementing Regulations.

☒ On the Claims:

- ☐ The amendments to claims _____ do not comply with Article 33 of the Patent Law.
- ☐ Claim(s) _____ is/are not patentable under Article 25 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with the definition of inventions prescribed by Rule 2 paragraph 1 of the Implementing Regulations.
- ☒ Claim(s) 1 does/do not possess the novelty as required by Article 22 paragraph 2 of the Patent Law.
- ☒ Claim(s) 2-6, 8 does/do not possess the inventiveness as required by Article 22 paragraph 3 of the Patent Law.
- ☐ Claim(s) _____ does/do not possess the practical applicability as required by Article 22 paragraph 4 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with Article 26 paragraph 4 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with Article 31 paragraph 1 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with the provisions of Rules 20-23 of the Implementing Regulations.
- ☐ Claim(s) _____ does/do not comply with Article 9 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with the provisions of Rule 12 paragraph 1 of the Implementing Regulations.

The detailed explanation of the above conclusions is set forth in the text portion of the Notification.

5. In view of the conclusions set forth above, the Examiner is of the opinion that:

- ☐ The applicant should make amendments to the application documents as directed in the text portion of the Notification.
- ☒ The applicant should expound in the response reasons why the application is patentable and make amendments to the application where there are deficiencies as pointed out in the text portion of the Notification, otherwise, the application will be rejected.
- ☐ The application contains no allowable invention, and therefore, if the applicant fails to submit sufficient reasons to prove that the application does have merits, it will be rejected.
- ☐

6. The followings should be taken into consideration by the applicant in making the response:

- (1) Under Article 37 of the Patent Law, the applicant should respond to the office action within 2 months counting from the date of receipt of the Notification. If, without any justified reason, the time limit is not met, the application shall be deemed to have been withdrawn.
- (2) Any amendments to the application should be in conformity with the provisions of Article 33 of the Patent Law. Substitution pages should be in duplicate and the format of the substitution should be in conformity with the relevant provision contained in "The Examination Guidelines".
- (3) The response to the Notification and/or revision of the application should be mailed to or handed over to the "Reception Division" of the Patent Office, and documents not mailed or handed over to the Reception Divisions have no legal effect.
- (4) Without an appointment, the applicant and/or his agent shall not interview with the Examiner in the Patent Office.

9. This Notification contains a text portion of 3 pages and the following attachments:

- ☐ _____ cited reference(s), totaling _____ pages. ☐

Examination Dept. 9 Examiner: Wei Wei Seal of the Examination Department



中华人民共和国国家知识产权局

100037 北京市阜成门外大街2号万通新世界广场8层 中国国际贸易促进委员会专利商标事务所 刘志平 M041383	发文日
申请号: 2004100473444	
申请人: 佳能株式会社	
发明名称: 电子发射器件, 电子源, 以及制造图像形成装置的方法	

第 2 次审查意见通知书

1. ☒ 审查员已收到申请人于 2007 年 4 月 29 日提交的意见陈述书, 在此基础上审查员对上述专利申请继续进行实质审查。

☐ 根据国家知识产权局专利复审委员会于 年 月 日作出的复审决定, 审查员对上述专利申请继续进行实质审查。

☐ 2. 申请人于 年 月 日提交的修改文件, 不符合专利法实施细则第 51 条第 3 款的规定。

3. 继续审查是针对下述申请文件进行的:

☐ 上述意见陈述书中所附的经修改的申请文件。

☒ 前次审查意见通知书所针对的申请文件以及上述意见陈述书中所附的经修改的申请文件替换页。

☐ 前次审查意见通知书所针对的申请文件。

☐ 上述复审决定所确定的申请文件。

☐ 4. 本通知书未引用新的对比文件。

☐ 本通知书引用下述对比文件(其编号续前, 并在今后的审查过程中继续沿用):

编号 文件号或名称 公开日期(或抵触申请的申请日)

5. 审查的结论性意见:

☐ 关于说明书:

☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。

☐ 说明书不符合专利法第 26 条第 3 款的规定。

☐ 说明书的修改不符合专利法第 33 条的规定。

☐ 说明书的撰写不符合专利法实施细则第 18 条的规定。

☐ 关于权利要求书:

☒ 权利要求 1 不具备专利法第 22 条第 2 款规定的新颖性。

☒ 权利要求 2-6, 8 不具备专利法第 22 条第 3 款规定的创造性。

☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。

☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。

☐ 权利要求 不符合专利法第 26 条第 4 款的规定。

☐ 权利要求 不符合专利法第 31 条第 1 款的规定。

☐ 权利要求 的修改不符合专利法第 33 条的规定。

☐ 权利要求 不符合专利法实施细则第 2 条第 1 款的规定。

☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。

☐ 权利要求 不符合专利法实施细则第 20 条的规定。

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(注: 凡寄给审查员个人的信函不具有法律效力)

申请号 2004100473444

- ☐ 权利要求 不符合专利法实施细则第 21 条的规定。
☐ 权利要求 不符合专利法实施细则第 22 条的规定。
☐ 权利要求 不符合专利法实施细则第 23 条的规定。

☐ 分案的申请不符合专利法实施细则第 43 条第 1 款的规定。
 上述结论性意见的具体分析见本通知书的正文部分。

6. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
☐ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

7. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的贰个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
 (2) 申请人对其申请的修改应符合专利法第 33 条和实施细则第 51 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
 (3) 申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
 (4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

8. 本通知书正文部分共有 2 页, 并附有下列附件:

- ☐ 引用的对比文件的复印件共 份 页。
☐

审查员: 魏逸 (9274)

2007 年 6 月 15 日

审查部门 审查协作中心

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2008. 7



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 (注: 凡寄给审查员个人的信函不具有法律效力)

第二次审查意见通知书正文

申请号：2004100473444

申请人于2007年4月29日提交了意见陈述书和经过修改的申请文件，审查员在阅读了上述文件后，对本申请继续进行审查，再次提出如下审查意见。

1. 权利要求1请求保护一种电子发射器件的制造方法。对比文件1（JP9-45236A）公开了一种电子发射器件的制造方法，并具体公开了（参见对比文件1说明书第0017段，第0046段至第0052段，附图1，2）以下技术特征：用于在形成于绝缘性基板1（相当于权利要求1中的衬底）上的一对电极5、6之间形成一个有机金属化合物高分子聚合物薄膜2（相当于权利要求1中的包括碳原子间偶联的固态绝缘聚合物薄膜）的步骤；用于加热所述聚合物薄膜2而将其变成包含非定形碳作为主要成分的（参见对比文件1的说明书第0017段）导电薄膜4的步骤；在所述一对电极5、6之间提供电位差从而使导电薄膜4上形成电子放出部3（相当于权利要求1中的电激发）的步骤。

由此可见，对比文件1公开了权利要求1的全部技术特征，二者技术领域相同、所要解决的技术问题和技术方案实质相同、所取得的技术效果实质相同，因此，权利要求1不具备专利法第二十二条第二款所规定的新颖性。

2. 权利要求2引用权利要求1。利用电子束照射的方式来加热聚合物薄膜，这属于本领域的常用技术手段，对本领域的普通技术人员来说，上述常用技术手段的使用是不需要付出创造性劳动的。因此，当其引用的权利要求1不具备新颖性时，权利要求2不具备专利法第二十二条第三款规定的创造性。

3. 权利要求3引用权利要求1。对比文件2（CN1176478A）公开了一种电子发射器件的制造方法，并具体公开了（参见对比文件2说明书第11页第24行至第13页第10行，附图1-3）利用激光照射的方式来加热电子发射区的有机材料薄膜（相当于权利要求3中的聚合物薄膜）。由此可见，权利要求3限定的附加技术特征已在对比文件2中公开，且该特征在对比文件2中所起的作用与其在本发明中为解决其技术问题所起的作用相同，都是用于加热有机材料薄膜。也就是说，在对比文件1的基础上结合对比文件2得出权利要求3所要求保护的技术方案，对本领域的技术人员来说是显而易见的。因此，当其引用的权利要求1不具备新颖性时，权利要求3不具备专利法第二十二条第三款规定的创造性。

4. 权利要求4、5引用权利要求3。利用氙灯或卤素灯作为发射用于加热物体的光的光源，这属于本领域的常用技术手段，对本领域的普通技术人员来说，上述常用技术手段的使用是不需要付出创造性劳动的。因此，当其引用的权利要求3不具备

创造性时，权利要求4、5不具备专利法第二十二条第三款规定的创造性。

5. 权利要求6引用权利要求3。对比文件2中（参见对比文件2说明书第11页第24行至第13页第10行，附图1-3）公开了使用激光束照射电子发射区的有机材料薄膜。由此可见，权利要求6限定的附加技术特征已在对比文件2中公开，且该特征在对比文件2中所起的作用与其在本发明中为解决其技术问题所起的作用相同，都是用于加热有机材料薄膜。因此，当其引用的权利要求3不具备创造性时，权利要求6不具备专利法第二十二条第三款规定的创造性。

6. 权利要求8引用权利要求1。在制造电子发射器件中，利用喷墨系统在衬底上形成聚合物薄膜，这属于本领域的常用技术手段，对本领域的普通技术人员来说，上述常用技术手段的使用是不需要付出创造性劳动的。因此，当其引用的权利要求1不具备新颖性时，权利要求8不具备专利法第二十二条第三款规定的创造性。

基于上述理由，以目前文本，本申请是不能被授权的。申请人应在本通知书指定的答复期限内陈述意见，或提交修改文本；申请人对申请文件修改时应满足专利法第三十三条的规定，不得超出原说明书和权利要求书的记载范围。

审查员：魏尧

代码：9274

电话：82755256